

ABSTRACT OF THE DISCLOSURE

There is provided a magnetoresistance element including a free layer that includes a first ferromagnetic layer and a second ferromagnetic layer whose magnetization directions are equal to each other and a nonmagnetic film intervening between the first and second ferromagnetic layers, a pinned layer including a third ferromagnetic layer that faces the free layer, and a nonmagnetic layer intervening between the free layer and the pinned layer, the nonmagnetic film containing a material selected from the group including titanium, vanadium, zirconium, niobium, molybdenum, technetium, hafnium, tungsten, rhenium, alloys thereof, semiconductors and insulators.